

Center Status Summaries

- Kennedy – May 2010: Brian Graf
- Ames – February 2011: Soheila Dianati
- Langley – September 2011: Steve Craft
- Johnson – March 2012: Pat Kolkmeier
- Stennis – October 2012: Mike Killiam
- Goddard-Wallops – Nov. 2012: Caroline Massey

Center Update

Kennedy Space Center



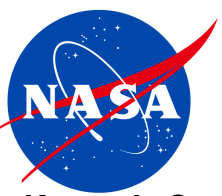


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Process for Assessing Climate Risks to Center Assets

- ◆ CASI funded modeling
- ◆ Ongoing effort with recent CASI funding approved
- ◆ All of KSC's assets at risk

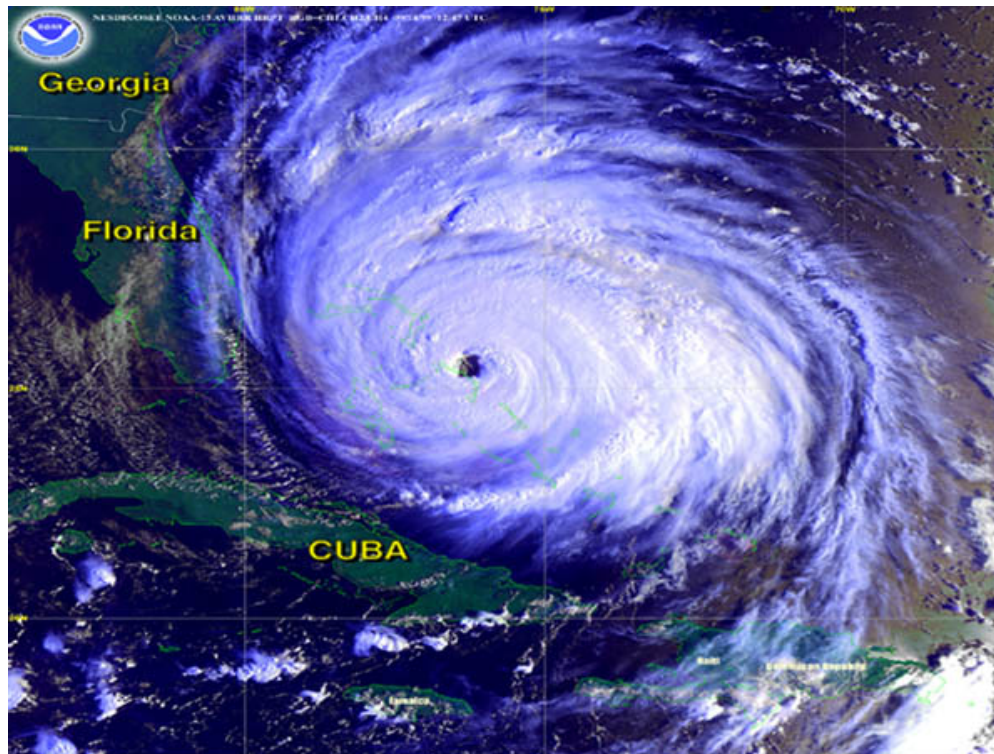




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Chief Climate Impacts of Concern

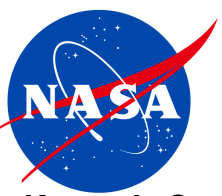
- ◆ Sea level rise – critical infrastructure launch capability
- ◆ Ground water rise – utility impacts
- ◆ More numerous and sever tropical weather events – infrastructure
- ◆ Temperature rise – utility usage





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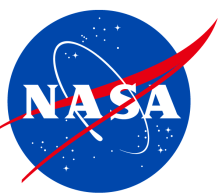


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Non-Infrastructure Risks

- ◆ KSC is home to 33 federally and state protected species that depend on the existing land use for survival





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Lagoon water level rise assessment

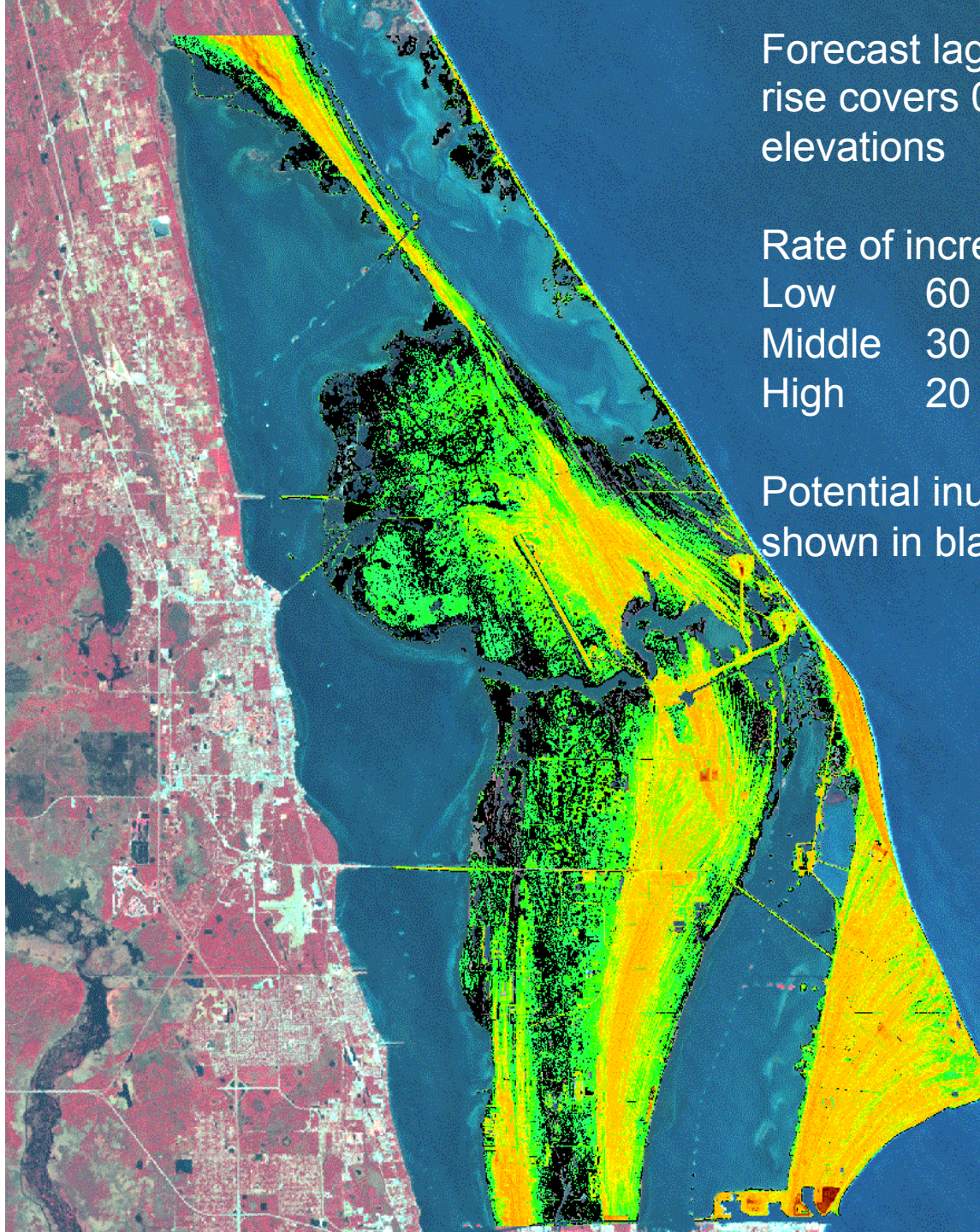
Current conditions:

Atlantic Ocean
mean sea level
-0.29 m NAVD88

Fall high water level
-0.12 m NAVD88

Indian River
Lagoon mean water
elevation
-0.21 m NAVD88

Fall high water level
-0.01 m NAVD88



Forecast lagoon level
rise covers 0.4 m
elevations

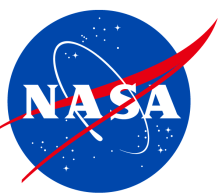
Rate of increase:

Low 60 - 140 yrs

Middle 30 - 45 yrs

High 20 - 35yrs

Potential inundation
shown in black



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Dune Removal & Erosion

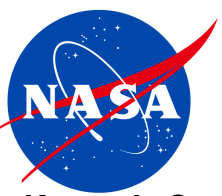
Aerial view looking north at critically eroded area between Pad A and Pad B



Scarped dune face at Pad A rail spur



10/29/2012



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Challenges and Accomplishments

- ◆ KSC recently notified that \$11M of GSDO funds targeted for long term shoreline erosion repair were “reassigned”
- ◆ No current mitigation funded
- ◆ Good news...CASI models show that most facilities first floor elevations will remain above water if worst case scenario of sea level rise is realized. However, underground utilities, stormwater management systems and roadways will be significantly impacted